

REMARKS

Applicant expresses appreciation to the Examiner for consideration of the subject patent application. This amendment is in response to the Office Action mailed May 3, 2005. Claims 1-25 were rejected. The claims and specification have been amended to address the concerns raised by the Examiner.

Claims 1-25 were originally presented. Claims 1-12 and 14-25 remain in the application. Claim 13 has been canceled without prejudice. Claims 1, 4, 12, 18, and 25 have been amended. No claims have been added.

Claim Rejections - 35 U.S.C. § 112

Claim 13 stands rejected under § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The subject matter of claim 13 has been added to the specification on page 10, line 12. Therefore, Applicant respectfully submits that the subject matter of claim 13 is allowable, and urges the Examiner to withdraw the rejection.

Claim Rejections - 35 U.S.C. § 102

Claims 1-4, 6-9, 12, 14-20, and 25 (including independent claims 1, 12, 18, and 25) were rejected under 35 U.S.C. § 102(b) as being anticipated by Goddard (US 6,883,110 B1).

In order to succinctly explain why the claims presented herein are allowable, Applicant will direct the following remarks primarily to the originally presented independent claims 1, 12, 18, and 25 with the understanding that once an independent claim is allowable, all claims depending therefrom are allowable.

The Examiner has asked the applicant to show that claim 1 is patentable in view of the prior art. Claim 1 has been amended to comprise a common operating system image included within the distributed data on the plurality of client systems. The common operating system image, or common operating environment (COE), as disclosed in an embodiment of the present application, can include an operating system, drivers, and applications used by a client system.

(See the Application, page 6, line 24 to page 7, line 32) An information technology specialist can use the COE to rapidly setup, backup, and/or restore desktop computer systems. This can be helpful in a large organization. The COE in the distributed data can be accessed and restored or setup on a client system without using large quantities of space on a server that are dedicated to storing multiple COEs.

Goddard fails to show distributed data including a computer operating environment image that can be used to backup, setup, and/or restore a desktop environment. Rather, Goddard discloses storage devices that “typically include information handling system data 126, 130, 134, 138 & 142, such as an operating system, system settings, applications, data, and the like, to be utilized locally by each respective client information handling system 104, 106, 108, 110 & 112. By utilizing the present invention, the storage devices 114, 116, 118, 120 & 122 may also be utilized to store server data 124, 128, 132, 136 and 140 to provide a backup of data included on the server appliance 102.” (Goddard, Col. 4, Lines 21-29).

Thus, Goddard does not disclose the concept of storing an operating environment image on a plurality of storage devices. Instead, Goddard teaches that each storage device has an operating system to be utilized locally. Also, Goddard fails to disclose accessing distributed data from a client system (storage device). Rather, Goddard teaches that the invention disclosed in Goddard is utilized to store server data to provide a backup of the data included on the server. There is no mention of storing computer operating environments distributed across the storage devices.

The same arguments can be applied to independent claim 25. Therefore, Applicant respectfully submits that claims 1 and 25 are allowable, and urges the Examiner to withdraw the rejections.

Independent claim 12 recites a plurality of client systems wherein the distributed storage file on the client systems each include a portion of the parity data that is inversely proportional in size to the number of client mass storage devices available. Goddard fails to disclose the concept of distributing parity data over a plurality of client mass storage devices, wherein the size of the parity data is inversely proportional to the number of client mass storage available. Therefore,

Applicant respectfully submits that claim 12 is allowable, and urges the Examiner to withdraw the rejection. This claim will be further discussed below.

Regarding claims 16 and 18, Goddard fails to show a common operating environment image stored on the mass storage devices and the client systems, as previously discussed. Therefore, Applicant respectfully submits that claims 16 and 18 are allowable, and urges the Examiner to withdraw the rejection.

Rejection of the dependent claims 2-4, 6-7, 9, 14-17, 19, and 20 should be reconsidered and withdrawn for at least the reasons given above with respect to the independent claims. The dependent claims, being narrower in scope, are allowable for at least the reasons for which the independent claims are allowable.

Therefore, Applicant respectfully submits that claims 1-4, 6-9, 12, 14-20, and 25 are allowable, and urges the Examiner to withdraw the rejection.

Claim Rejections - 35 U.S.C. § 103

Claims 5 and 23-24 were rejected under 35 U.S.C. § 103 as being unpatentable over Goddard in view of Murphrey et al. (Murphrey) (US 6,735,692 B1).

The Goddard and Murphrey references, when combined, do not teach or suggest all of the elements of claim 5. Specifically, the Goddard reference does not teach or suggest a common operating environment image stored in the distributed storage files of the client systems. Further, Goddard does not teach or suggest image assembly and loading logic configured to assemble and install the COE image, and the Murphrey reference does not overcome these deficiencies.

Murphrey discloses a method and system for directing a network boot. A network boot is typically used to enable a remote boot from a server for a computer that does not have an operating system locally installed, such as a computer that does not have an attached hard drive. Murphrey enables a client to obtain a network boot from a remote file server. The boot is then redirected to a local server. (See Murphrey, Col. 2, Lines 44-48). This allows direct access between the client and a local server. Murphrey does not teach or disclose the concept of image assembly and loading logic configured to assemble and install a common operating environment. A network boot is typically needed only when an OS image will not be installed on a computer.

The OS image referred to in Murphrey is an OS existing on a network server that can boot a desktop computer. (See Murphrey, Col. 3, Lines 15-32). Thus, Murphrey does not teach or suggest image assembly and loading logic configured to assemble and install the COE image.

Therefore, Applicant respectfully submits that claim 5 is allowable, and urges the Examiner to withdraw the rejection.

Regarding independent claim 23, Goddard fails to teach or suggest a method for installing a common operating environment from a distributed storage array on a network. As previously discussed, Goddard merely discloses the concept of backing up a server. Goddard does not teach the concept of dividing a common operating environment (COE) image into a plurality of image segments. As disclosed in the present application, the COE image does not need to be placed on a server. The COE can be assembled directly from the distributed storage files of the client systems. This can enable a target client, such as a desktop computer on a network, to be setup, backed up, or reconfigured without the need for accessing the server or using slower, off-network sources to install the COE onto a target client.

The Murphrey reference does not overcome these deficiencies. A common operating environment image as disclosed in the present application can include an operating system, drivers needed by a computer to run the operating system, and software typically used by a client system. The OS image referred to in Murphrey is used to manage the client for the network boot. (See Murphrey, Col. 3, Lines 15-32). As previously stated, an OS boot is accomplished by loading the operating system onto a remote computer that does not have the capability of storing an OS locally (i.e. there is no hard drive on the remote computer). Murphrey merely manages which server is used to load the OS onto the remote computer. Further, the OS image is run from a server, not loaded onto a computer to enable the computer to operate.

Therefore, Applicant respectfully submits that claim 23 is allowable, and urges the Examiner to withdraw the rejection.

Rejection of the dependent claim 24 should be reconsidered and withdrawn for at least the reasons given above with respect to independent claim 23. The dependent claim, being narrower in scope, is allowable for at least the reasons for which the independent claim is allowable.

Claims 11 and 13 were rejected under 35 U.S.C. § 103 as being unpatentable over Goddard in view of Anderson (US 6,442,649 B1).

Regarding claim 11, Anderson teaches a method for adding an additional storage device to a storage array by allowing data blocks of parity data to be initialized to zero. (See Abstract). In contrast, claim 11 claims a distributed storage file on the client mass storage that is dynamically resizable. Anderson does not teach that any of the storage devices are dynamically resizable. Rather, it merely teaches a method for initializing parity data blocks to zero to enable additional drives to be added to a storage array. The Goddard reference does not overcome these deficiencies.

The subject matter of claim 13 of the present application was added to independent claim 12. Claim 12 now claims the distributed storage file on the client systems each include a portion of the parity data that is inversely proportional in size to the number of client mass storage devices available. In contrast, the method for initializing parity blocks to zero on new storage drives is disclosed by Anderson. Again, the Goddard reference does not overcome these deficiencies.

Therefore, Applicant respectfully submits that claims 11 and independent claim 12 are allowable, and urges the Examiner to withdraw the rejections.

Rejection of the dependent claims 10, 21, and 22 should be reconsidered and withdrawn for at least the reasons given above with respect to the independent claims. The dependent claims, being narrower in scope, are allowable for at least the reasons for which the independent claims are allowable.

CONCLUSION

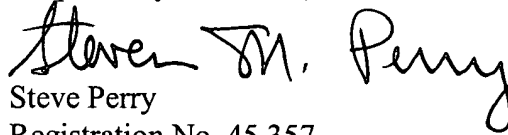
In light of the above, Applicant respectfully submits that pending claims 1-12 and 14-25 are now in condition for allowance. Therefore, Applicant requests that the rejections and objections be withdrawn, and that the claims be allowed and passed to issue. If any impediment to the allowance of these claims remains after entry of this Amendment, the Examiner is strongly encouraged to call Steve Perry at (801) 566-6633 so that such matters may be resolved as expeditiously as possible.

No claims were added. Therefore, no additional fee is due.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 08-2025.

DATED this 29th day of July, 2004.

Respectfully submitted,


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